

PENDING CLAIMS

1. (previously presented) A communication device for transferring data between two devices coupled to a network, said communication device comprising:

a dual-port memory for storing data;

a high-speed interface for transmitting said data between a first device and said dual-port memory, wherein said high-speed interface communicates data at an initial rate;

a plurality of low-speed interfaces, each connected to a respective one of a plurality of links to said second device, for transmitting data from said dual-port memory to said respective one of said plurality of links at one of a plurality of data rates, wherein at least two of said plurality of data rates are unequal and are fractions of said initial rate, all said fractions being capable of reduction to a common denominator and at least one of said fractions being irreducible; and

a controller for controlling said memory and said interfaces and for monitoring a data rate of said data between said memory and said plurality of links, wherein said controller includes means for cyclically distributing data to be communicated from said memory to said second device among said low-speed interfaces, such that each of said plurality of low speed interfaces receives a number of consecutive units of said data equal to the numerator of its associated fraction.

2.-6. (canceled)

7. (previously presented) The communication device of Claim 1, wherein at least one of the set of said high-speed interface and said plurality of low speed interfaces comprises means for establishing a connection with a modem.

8.-9. (canceled)

10. (previously presented) The communication device of Claim 1, said high speed interface further comprises means for receiving said data at said initial rate, wherein said initial rate is equal to a sum of said plurality of data rates.

11. (previously presented) The communication device of Claim 10, wherein at least two of said data rates are equal.

12. (previously presented) The communication device of Claim 1, wherein said initial rate equals a sum of said plurality of data rates.

13. (previously presented) The communication device of Claim 1, said controller further comprises means for reporting said data rates.

14. (previously presented) The communication device of Claim 1, wherein:

said high speed interface further comprises means for transmitting said data at said initial rate, wherein said initial rate is equal to a sum of said plurality of data rates and at least two of said data rates are unequal.

15. (previously presented) A computer program product in a computer-readable medium for transferring data between two devices coupled to a network, said computer program product comprising:

a computer-readable medium;

instructions on the computer-readable medium for storing data in a dual-port memory;

instructions on the computer-readable medium for transmitting, across a high-speed interface, said data between a first device and said dual-port memory, wherein said high-speed interface communicates data at an initial rate;

instructions on the computer-readable medium for regulating a plurality of low-speed interfaces, each of said plurality of low-speed interfaces being connected to a respective one of a plurality of links to said second device for transmitting data from said dual-port memory to said respective one of said plurality of links at one of a plurality of data rates, wherein at least two of said plurality of data rates are unequal and are fractions of said initial rate, all said fractions being capable of reduction to a common denominator and at least one of said fractions being irreducible; and

instructions on the computer-readable medium for cyclically distributing data to be communicated from said memory to said second device among said low-speed interfaces, such that

each of said plurality of low speed interfaces receives a number of consecutive units of said data equal to the numerator of its associated fraction.

16. (previously presented) The computer program product of Claim 15, wherein at least one of the set of instructions for transmitting across a high-speed interface and instructions for regulating plurality of low speed interfaces comprises instructions for establishing a connection with a modem.

17. (previously presented) The computer program product of Claim 15, wherein said instructions for transmitting across a high-speed interface further comprise instructions for receiving said data at said initial rate, wherein said initial rate is equal to a sum of said plurality of data rates.

18. (previously presented) The computer program product of Claim 17, wherein said transmitting instructions further comprise instructions for transmitting when at least two of said data rates are equal.

19. (previously presented) The computer program product of Claim 15, wherein said transmitting instructions further comprise instructions for setting said initial rate equal to a sum of said plurality of data rates.

20. (previously presented) The computer program product of Claim 15, wherein said operating instructions further comprise instructions for reporting said data rates.

21. (previously presented) The computer program product of Claim 15, wherein:
said instructions for transmitting across said high-speed interface further comprise instructions for transmitting said data at said initial rate, wherein said initial rate is equal to a sum of said plurality of data rates and at least two of said data rates are unequal.

22. (previously presented) A method for transferring data between two devices coupled to a network, said method comprising:
storing data in a dual-port memory;

transmitting said data across a high-speed interface between a first device and said dual-port memory, wherein said transmitting further comprises transmitting across said high-speed interface at an initial rate;

operating a plurality of low-speed interfaces, each connected to a respective one of a plurality of links to said second device, for transmitting data from said dual-port memory to said respective one of said plurality of links at one of a plurality of data rates, wherein at least two of said plurality of data rates are unequal and are fractions of said initial rate, all said fractions being capable of reduction to a common denominator and at least one of said fractions being irreducible; and

controlling a data rate of said data between said memory and said plurality of links, wherein said controlling includes cyclically distributing data to be communicated from said memory to said second device among said low-speed interfaces, such that each of said plurality of low speed interfaces receives a number of consecutive units of said data equal to the numerator of its associated fraction.

23. (previously presented) The method of Claim 22, wherein at least one of the set of said transmitting and said operating step further comprise establishing a connection with a modem.

24. (previously presented) The method of Claim 22, wherein said transmitting step further comprises step of receiving said data at said initial rate, wherein said initial rate is equal to a sum of said plurality of data rates.

25. (previously presented) The method of Claim 24, said transmitting step further comprises transmitting wherein at least two of said data rates are equal.

26. (previously presented) The method of Claim 22, wherein said transmitting step further comprises transmitting at an initial rate equal to a sum of said plurality of data rates.

27. (previously presented) The method of Claim 22, wherein said controlling step further reporting said data rates.